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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,398	07/26/2001	Ryoichi Inanami	04329.2612	5029

22852 7590 06/30/2005

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EXAMINER

STEVENS, THOMAS H

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/912,398

Applicant(s)

INANAMI ET AL.

Examiner

Thomas H. Stevens

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-6,10 and 11 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,4-6,10 and 11 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-11 were examined.
2. Claims 2-3 and 7-9 are cancelled.
3. Claims 1,4-6 and 10-11 were examined.

Section I: Response to Applicant's Arguments (1st Office Action)

35 USC § 103

- 4 Applicant is thanked for addressing this issue; however, examiner has discovered new art in light of amended claims.

Section II: Final Rejection (2nd Office Action)

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

6. Claim1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Examiner is unclear as to whether the following phrase within claim affirms patentable weight: "causing the person who wishes to place an order to input".

Claim Rejections - 35 USC § 103

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1,4-6 and 10-11 were rejected under 35 U.S.C. 103 (a) as obvious by Gordon et al. (U.S. Patent 6, 090, 528 (2000)) in view of Zizzo (U.S. Patent 6,578,174 (2003)). Gordon et al. teaches a shaped beam lithograph for generating variable-shaped spots on photoresist for use in integrated circuit manufacturing; but doesn't teach chip design via the Internet.

At the time of invention, it would have been obvious to one of ordinary skill in the art to ^{use} ~~models~~ Gordon et al. by way of Zizzo since it would be advantageous to connect participants in the electronic design process, including end users and suppliers, through a single portal site that facilitates information exchange and commercial transactions (Zizzo: column 3, lines 62-66).

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Claim 1. A method of producing a semiconductor device (Zizzo: column 4, lines 60-65; Gordon: column 1, lines 44-45) upon receiving an order for the semiconductor device (Zizzo: column 4, lines 60-65; Gordon: column 1, lines 44-45) by transferring information between a person who wishes to receive an order and a person who wishes to place an order through a network, the method comprising: causing the person who wishes to place an order to input specifications of the semiconductor device (Zizzo: column 4, lines 60-65; Gordon: column 1, lines 44-45) by request of the person who wishes to receive an order; generating a plurality of circuit patterns, based on the specifications of the semiconductor device, the circuit patterns including a circuit pattern generated by using a stored character projection (CP) (Gordon: column3, lines 1-8) aperture for charged-particle beam exposure and a circuit pattern generated by using the stored CP aperture and a CP aperture to be newly produced and obtaining a plurality of design parameters for each of the circuit patterns, and calculating a cost (Zizzo: column 3, lines 62-66) and a delivery time period for each of the circuit patterns, the cost (Zizzo: column 3, lines 62-66) including a cost (Zizzo: column 3, lines 62-66) for producing the CP(Gordon: column3, lines 1-8) aperture to be newly prepared; and presenting plurality of design parameters and the cost (Zizzo: column 3, lines 62-66) and the delivery time period for each of the circuit patterns to the person who wishes to place an order for each of the circuit patterns and causing the person who wishes to place an order to select a circuit pattern satisfying a desired condition.

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Claim 4 The method according to claim 1, (Zizzo: column 4, lines 60-65; Gordon: column 1, lines 44-45; Gordon: column3, lines 1-8; Zizzo: column 3, lines 62-66) further comprising: requesting a device maker to generate the selected circuit pattern through the network (Zizzo: column 7, lines 3-45) after the circuit pattern is ordered by the person who wishes to place an order.

Claim 5. The method according to claim 1, (Zizzo: column 4, lines 60-65; Gordon: column 1, lines 44-45; Gordon: column3, lines 1-8; Zizzo: column 3, lines 62-66) further comprising; requesting a CP (Gordon: column3, lines 1-8) aperture maker to produce the CP aperture (Gordon: column3, lines 1-8) to be newly produced through the network m (Zizzo: column 7, lines 3-45) after the circuit pattern is ordered by the person who wishes to place an order.

Claim 6. A method of producing a semiconductor device (Zizzo: column 4, lines 60-65; Gordon: column 1, lines 44-45) upon receiving an order for the semiconductor device (Zizzo: column 4, lines 60-65; Gordon: column 1, lines 44-45) based on information transferred between a person who wishes to receive an order and a person who wishes to place an order through the network, the method comprising; causing a person wishes to place and order to input specifications of the semiconductor device (Zizzo: column 4, lines 60-65; Gordon: column 1, lines 44-45) by request of the person who wishes to receive an order; transmitting the specifications of the semiconductor device (Zizzo: column 4, lines 60-65; Gordon: column 1, lines 44-45) to a server, and causing the

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server to generate a plurality of circuit patterns based on the specifications of the semiconductor device, (Zizzo: column 4, lines 60-65; Gordon: column 1, lines 44-45) the circuit patterns including a circuit pattern generated by using a stored CP aperture (Gordon: column3, lines 1-8) for charged-particle beam exposure and a circuit pattern generated by using the stored CP aperture (Gordon: column3, lines 1-8) and a CP aperture to be newly produced, and to obtain a plurality of design parameters for each of the circuit patterns; receiving said plurality of design parameters from the server; and presenting said plurality of designs parameters to the person who wishes to place and order for each of the circuit patterns and causing the person who wishes to place an order a circuit pattern satisfying a desired condition (Zizzo: column 9, lines 50-61).

Claim 10. A program product for causing a computer system to produce a semiconductor device (Zizzo: column 4, lines 60-65; Gordon: column 1, lines 44-45) upon receiving an order for the semiconductor device (Zizzo: column 4, lines 60-65; Gordon: column 1, lines 44-45) by transferring information between a person who wishes to receive an order and a person who wishes to place an order through a network, (Zizzo: column 4, lines 3-6) the program product comprising: a recording medium; and first, second, and third instruction means which are operated by the computer system and which are recorded on the recording medium, (Zizzo: column 4, lines 3-49; column 8, lines 5-10) wherein the first instruction means provides the computer system with an instruction to cause the person who wishes to place an order to input specifications of the semiconductor device (Zizzo: column 4, lines 60-65;

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Gordon: column 1, lines 44-45) by request of the person who wishes to receive and order; the second instruction means a plurality of circuit patterns based on the specifications for the semiconductor device, (Zizzo: column 4, lines 3-49) the circuit patterns including a circuit pattern generated by using a stored CP aperture (Gordon: column 3, lines 1-8) for charged-particle beam exposure and a circuit pattern generated by using the stored CP aperture (Gordon: column 3, lines 1-8) and a CP aperture to be newly produced, and obtains a plurality of design parameters for each of the circuit patterns (Zizzo: column 10, lines 30-65); and a third instruction means presents plurality of design parameters to the person who wishes to place an order for each of the circuit patterns (Zizzo: column 4, lines 3-49) and cause the person who wishes to place an order to select a circuit pattern satisfying a desired condition (Zizzo: column 10, lines 30-65; Zizzo: column 9, lines 50-61).

Claim 11. A data signal which is embodied by a carrier, for allowing a semiconductor device (Zizzo: column 4, lines 60-65; Gordon: column 1, lines 44-45) to be produced upon receiving an order for these semiconductor device (Zizzo: column 4, lines 60-65; Gordon: column 1, lines 44-45) based on information transferred between a person who wishes to receive an order and a person who wishes to place an order through a network, (Zizzo: column 4, lines 3-49; column 8, lines 5-10) the data signal comprising: a first program code portion which is configured to cause the person who wishes to place an order to input specifications of the semiconductor device (Zizzo: column 4, lines 60-65; Gordon: column 1, lines 44-45) by request of the person who wishes to

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receive an order; a second program code portion which is configured to generate a plurality of circuit patterns based on the specifications of the semiconductor device (Zizzo: column 4, lines 60-65; Gordon: column 1, lines 44-45), the circuit patterns including a circuit pattern generated by using a stored CP aperture (Gordon: column3, lines 1-8) for charged-particle beam exposure and a circuit pattern generated by using the stored CP aperture (Gordon: column 3, lines 1-8) and a CP aperture to be newly produced, and obtain a plurality of design parameters for each of the circuit patterns (Zizzo: column 4, lines 3-49; column 8, lines 5-10); and a third program code portion which is configured to present plurality of design parameters to the person who wishes to place an order for each of the circuit patterns and cause the person who wishes to place an order to select a circuit pattern satisfying a desired condition (Zizzo: column 10, lines 30-65; Zizzo: column 9, lines 50-61).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Tom Stevens whose telephone number is 571-272-3715, Monday-Friday (8:00 am- 4:30 pm) or contact Supervisor Mr. Leo Picard at (571) 272-3749. Fax number is 571-273-3715.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

June 23, 2005

W. House
TC 2100
Art 2123
Primary Examiner

THS